WHAT IS CLAIMED IS:

A method for the treatment of an infection in a patient, which comprises administering to said patient a therapeutically effective amount of a bisperoxovanadium (bpV) compound.

- 2. The method of claim 1, wherein said bpV compound is a phosphotyrosyl phosphatase inhibitor.
- 3. The method of claim 2, wherein said bpV compound comprises an oxo ligand, two peroxo anions, and an ancillary ligand located in an inner coordination sphere of vanadate.
- The method of claim I, wherein said infection is caused by a virus.
- 5. The method of claim 1, wherein said patient is a mammal.
- The method of claim 5, wherein said mammal is selected from the group consisting of human, ovine, bovine, equine, caprine, porcine, feline and canine.
- 7. The method of claim 2, wherein said patient is a human.
- The method of claim 7, wherein said virus is a human virus selected from the group consisting of DNA viruses, RNA viruses and Retroviridae.
- 9. The method of claim 7, wherein said virus is immunodeficiency virus.
- The method of claim 1, wherein the bpV compound is administered 10. intravenously, subcutaneously, intradermally, transdermally, intraperitoneally, orally or topically.
- 11. The method of claim 1, wherein the bpV compound is administered with a patch or an implant.

Sub.a)

- 12. The method of claim 1, wherein the bpV compound is administered by inhalation.
- 13. The method of claim 12, wherein the bpV compound is administered with an aerosol spray.
- 14. The method of claim 12, wherein the bpV compound is in a powder form.
- 15. The method of claim 1, wherein the bpV compound is in association with a liposomal composition suitable for administration.
- 16. The method of claim 1, wherein the bpV compound is in a tablet form.
- 17. The method of claim 1, wherein the bpV compound is administered in combination with an antiviral agent.
- 18. The method of claim 17, wherein the antiviral agent is selected from the group consisting of nucleoside analogues, protease and neuraminidase inhibitors, interferon α , and non nucleoside analogues.
- 19. The method of claim 17, wherein the antiviral agent is selected from the group consisting of AZT and 3TC.
- 20. The method of claim 1, wherein the bpV compound is administered in combination with one or more immunomodulator(s).
- 21. The method of claim 20, wherein said immunomodulator is selected from the group consisting of leukotrienes, chemokines, cytokines, growth factors and interferons.

A method for the enhancement of antimicrobial efficacy of antimicrobial agents, which comprises administering to a patient undergoing an .

antimicrobial therapy, a therapeutically effective amount of a bis-peroxovanadium (bpV) compound.

- 23. The method of claim 22, wherein said bpV compound is a phosphotyrosyl phosphatase inhibitor.
- 24. The method of claim 23, wherein said bpV compound comprises an oxo ligand, two peroxo anions, and an ancillary ligand located in an inner coordination sphere of vanadate.
- 25. The method of claim 22, wherein said patient is a mammal.
- 26. The method of claim 25, wherein said mammal is selected from the group consisting of human, ovine, bovine, equine, caprine, porcine, feline and canine.
- 27. The method of claim 24, wherein said patient is a human.
- 28. The method of claim 27, wherein said antimicrobial agent is selected from the group consisting of nucleoside analogues, protease and neuraminidase inhibitors, interferon α , and non nucleoside analogues, such as non nucleoside reverse transcriptase inhibitors (NNRTI), chemokines and chemokines antagonists
- 29. The method of claim 22, wherein the bpV compound is administered intravenously, subcutaneously, intradermally, transdermally, intraperitoneally, orally or topically.
- 30. The method of claim 22, wherein the bpV compound is administered with a patch or an implant.
- 31. The method of claim 22, wherein the bpV compound is administered by inhalation.
- 32. The method of claim 31, wherein the bpV compound is administered with an aerosol spray.

- 33. The method of claim 32, wherein the bpV compound is in a powder form.
- 34. The method of claim 22, wherein the bpV compound is in association with a liposomal composition suitable for administration.
- 35. The method of claim 22, wherein the bpV compound is in a tablet form.

A pharmaceutical composition for the treatment of an infection in a patient, which comprises an therapeutically effective amount of a bisperoxovanadium (bpV) compound in association with a pharmaceutically acceptable carrier.

- 37. The pharmaceutical composition of claim 36, wherein said bpV compound is a phosphotyrosyl phosphatase inhibitor.
- 38. The pharmaceutical composition of claim 37, wherein said bpV compound comprises an oxo ligand, two peroxo anions, and an ancillary ligand located in an inner coordination sphere of vanadate.
- 39. The pharmaceutical composition of claim 36, wherein said infection is caused by a virus.
- 40. The pharmaceutical composition of claim 36, wherein said patient is a mammal.
- The pharmaceutical composition of claim 40, wherein said mammal is selected from the group consisting of human, ovine, bovine, equine, caprine, porcine, feline and canine.
- 42. The pharmaceutical composition of claim 36, wherein said patient is a human.

- 43. The pharmaceutical composition of claim 42, wherein said said virus is a human virus selected from the group consisting of DNA viruses, RNA viruses and Retroviridae.
- 44. The pharmaceutical composition of claim 42, wherein said virus is a human immunodeficiency virus.
- 45. The pharmaceutical composition of claim 36, wherein said pharmaceutically acceptable carrier is adapted to be administered intravenously, subcutaneously, intradermally, transdermally, intraperitoneally, orally or topically.
- 46. The pharmaceutical composition of claim 36, wherein said pharmaceutically acceptable carrier is adapted to be administered with a patch or an implant.
- 47. The pharmaceutical composition of claim 36, wherein said pharmaceutically acceptable carrier is adapted to be administered by inhalation.
- 48. The pharmaceutical composition of claim 47, wherein said pharmaceutically acceptable carrier is adapted to be administered with an aerosol spray.
- 49. The pharmaceutical composition of claim 48, wherein said pharmaceutically acceptable carrier is in a powder form.
- 50. The pharmaceutical composition of claim 36, wherein said pharmaceutically acceptable carrier is a liposomal composition.
- 51. The pharmaceutical composition of claim 36, wherein said composition is in a tablet form.
- 52. The pharmaceutical composition of claim 36, wherein said composition further comprises an antiviral agent.

- 53. The pharmaceutical composition of claim 52, wherein the antiviral agent is selected from the group consisting of nucleoside analogues, protease and neuraminidase inhibitors, interferon α , and non nucleoside analogues.
- 54. The pharmaceutical composition of claim 52, wherein the antiviral agent is selected from the group consisting of AZT and 3TC.
- 55. The pharmaceutical composition of claim 36, wherein said composition further comprises an immunomodulator.
- 56. The pharmaceutical composition of claim <u>55</u>, wherein the immunomodulator is selected from the group consisting of leukotrienes, chemokines, cytokines, growth factors and interferons.